李明东

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教育经历

香港科技大学（The Hong Kong University of Science and Technology）   *2021.09 - Present*
博士在读，PhD in Individualized Interdisciplinary Program (Robotics and Autonomous System)
Computational Cognitive Engineering Lab
导师: Prof. Yiwen WANG, Prof. Qifeng CHEN (co-supervision)

浙江大学   *2018-2021*
硕士，机械工程
流体动力与机电系统国家重点实验室
导师: 冯毅雄教授

同济大学   *2013-2018*
学士，机械设计制造及其自动化
中德机械工程试验区

研究兴趣

脑机接口，类脑智能，NeuroAI，穿戴式设备

当前工作

1. **Mingdong Li**, Shuhang Chen, Zhiwei Song, Xiang Zhang, Camilo Libedinsky, Rosa So, Yiwen Wang*. Assessing Modifications of Functional Neural Connectivity in Point Process Filter for Neuroprosthetic Control, ***IEEE Transactions on Biomedical Engineering***. *(即将提交)*

2. Zhiwei Song, Xiang Zhang, **Mingdong Li**, Jieyuan Tan, Yiwen Wang*. An Online Knowledge Transfer Framework for Task Learning in Brain-Machine Interfaces, ***IEEE Transactions on Neural Systems and Rehabilitation Engineering***. *(即将提交)*

3. **Mingdong Li**, Shuhang Chen†, Xiang Zhang, Yiwen Wang*. Neural Correlation Integrated Adaptive Point Process Filtering on Population Spike Trains, ***IEEE Transactions on Neural Systems and Rehabilitation Engineering***, 2024. *(在审, †: co-first author)*

论文发表（期刊）

1. **Mingdong Li**, Shanhe Lou*, Hao Zheng, Yixiong Feng, Yicong Gao, Siyuan Zeng, Jianrong Tan. A Cognitive Analysis-based Key Concepts Derivation Approach for Product Design, ***Expert Systems With Applications***, 2024.

2. **Mingdong Li**, Shanhe Lou*, Yicong Gao, Hao Zheng, Bingtao Hu, Jianrong Tan. A Cerebellar Operant Conditioning-inspired Constraint Satisfaction Approach for Product Design Concept Generation, ***International Journal of Production Research***, 2023.

3. Xuanyu Wu, Zhaoxi Hong*, Yixiong Feng, **Mingdong Li**, Shanhe Lou, Jianrong Tan. A Semantic Analysis-driven Customer Requirements Mining Method for Product Conceptual Design, ***Scientific Reports***, 2022.

4. Yixiong Feng, **Mingdong Li**, Shanhe Lou*, Yicong Gao, Jianrong Tan. A Digital Twin-Driven Method for Product Performance Evaluation Based on Intelligent Psycho-Physiological Analysis, ***Transaction of the ASME, Journal of Computing and Information Science in Engineering***, 2021.

论文发表（会议）

1. **Mingdong Li**, Mingyi Wang, Yiwen Wang*. An Adaptive Superposition Point Process Model with Neuronal Encoding Engagement Identification, *2024 46th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC).* IEEE, 2024.

2. Zixu Wang, Shuhang Chen†, **Mingdong Li**, Yiwen Wang*. Tracking Dynamic Conditional Neural Correlation during Task Learning, *2024 46th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC).* IEEE, 2024. *(†: co-first author))*

3. **Mingdong Li**, Shuhang Chen, Zhijia Zhao, Yiwen Wang*. Tracking the Dynamic Functional Neural Connectivity via Conjugate Gradient Optimization, *2023 45th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC).* IEEE, 2023.

4. **Mingdong Li**, Shuhang Chen, Xi Liu, Zhiwei Song, Yiwen Wang*. Modeling Neural Connectivity in a Point-Process Analogue of Kalman Filter, *2022 44th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC).* IEEE, 2022.

项目参与及活动组织

国家自然科学基金面上项目：支持设计认知的机械产品创新设计理论、方法及应用研究	参与
国家重点研发项目课题：复杂产品全生命周期价值链协同平台研发	参与
授权国家发明专利	*2 项*
报告助理, 4th International Workshop on Neural Engineering & Rehabilitation	*2023.08*
海报展示, 3rd International Workshop on Neural Engineering & Rehabilitation	*2022.05*

教学工作

本科生暑期研究、毕业设计指导	*2024.07-2025.07*
助教, ELEC4130 Machine Learning on Images	*2023 春季学期*
助教, EMIA4110 Practical Machine Learning	*2024 春季学期*

荣誉及奖项

NextGen Scholar Award (IEEE Annual International Conference of EMBS)	*2024.06*
研究生奖学金，科研旅行奖学金	*since 2021.09*
浙江大学研究生毕业奖学金	*2021.03*
之江实验室 AI 竞赛-多目标跟踪赛道，优胜奖（6-12 名）	*2019.10*
第七届全国大学省机械设计创新竞赛，一等奖	*2016.07*
上海市大学省机械创新竞赛，一等奖	*2016.04*
同济大学学术奖学金，二等 2 次、三等 1 次	*2013-2018*